

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-7 (Canceled).

Claim 8 (Previously Presented): An image processing circuit configured to perform a predetermined image processing of pixel data in an image photographed by an image pickup device, said circuit comprising:

a real time processing unit configured to sequentially input the pixel data photographed by said image pickup device, perform, by real time processing, a predetermined general image processing of the inputted pixel data, and output the generally processed pixel data;

a main memory configured to store the generally processed pixel data outputted from said real time processing unit, in image frame units; and

a central control unit configured to execute exceptional image processing as a software program processing with respect to the stored generally processed pixel data, and store the exceptionally processed pixel data in said main memory, wherein said real time processing unit is further configured to perform a circulating addition processing function in which a pixel data residing on a same position in a preceding frame of pixel data stored in said main memory and a corresponding pixel data in each frame inputted sequentially are respectively subjected to multiplication with a predetermined weighting factor and addition when the pixel data inputted sequentially extends multiple frames, and store results of the circulating addition processing function in said main memory,

said weighting factor comprising a first factor to be multiplied by a pixel data residing at the same position in the preceding frame stored in said main memory, and a second factor

to be multiplied by each corresponding pixel data in each frame inputted sequentially, a sum of said first and second factors being one.

Claim 9 (Canceled).

Claim 10 (Currently Amended): An image processing circuit configured to perform a predetermined image processing of pixel data in an image photographed by an image pickup device, said circuit comprising:

a real time processing unit configured to sequentially input the pixel data photographed by said image pickup device, perform, by real time processing, a predetermined general image processing of the inputted pixel data, and output the generally processed pixel data;

a main memory configured to store the generally processed pixel data outputted from said real time processing unit, in image frame units; and

a central control unit configured to execute exceptional image processing as a software program processing, and store the exceptionally processed pixel data in said main memory,

wherein said real time processing unit has a function of selecting at least said a cumulative addition processing function as defined in claim 7, and said circulating addition processing function as defined in claim 8,

said cumulative addition processing function includes a processing in which a pixel data residing on a same position in a preceding frame of pixel data stored in said main memory is added to a corresponding pixel data in each frame inputted sequentially when the pixel data inputted sequentially extends multiple frames.

Claim 11 (Currently Amended): An image processing circuit configured to perform a predetermined image processing of pixel data in an image photographed by an image pickup device, said circuit comprising:

a real time processing unit configured to sequentially input the pixel data photographed by said image pickup device, perform, by real time processing, a predetermined general image processing of the inputted pixel data, and output the generally processed pixel data;

a main memory configured to store the generally processed pixel data outputted from said real time processing unit, in image frame units; and

a central control unit configured to execute exceptional image processing as a software program processing, and store the exceptionally processed pixel data in said main memory,

wherein said real time processing unit has a function of selecting ~~said a~~ cumulative addition processing function ~~as defined in claim 7~~, said circulating addition processing function as defined in claim 8, and ~~said a~~ pixel compensation function ~~as defined in claim 9~~,

said cumulative addition processing function includes a processing in which a pixel data residing on a same position in a preceding frame of pixel data stored in said main memory is added to a corresponding pixel data in each frame inputted sequentially when the pixel data inputted sequentially extends multiple frames,

said pixel compensation function, including a shading compensation, includes a processing in which each pixel data inputted sequentially is multiplied by a predetermined pixel compensation parameter previously stored in said main memory.

Claims 12-27 (Canceled).